DEPARTMENT OF THE ARMY



HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND 102 MCNAIR DRIVE FORT MONROE VIRGINIA 23651-1047

ATCD-EM (70) 20 Jan 03

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Simulation Support Plan (SSP)

1. References:

- a. Army Regulation 5-11, Management of Army Models and Simulations, 1 Aug 97.
- b. Memorandum, HQ TRADOC, ATCD-ZC, 31 May 02, subject: Development and Approval of Army Warfighting Requirements.
- c. Memorandum, HQ DA, DAMO-ZS, 18 Sep 02, subject: Army Model and Simulation Office (AMSO) Position on the Simulation Support Plan (SSP) Requirement.
- d. Memorandum, HQ DA, DAMO-ZS, 20 Sep 02, subject: Revised Planning Guidelines for Simulation and Modeling for Acquisition, Requirements and Training (SMART).
- e. Memorandum, HQ TRADOC, ATCD-ZC, 26 Sep 02, subject: Simulation Support Plan (SSP).
- 2. This memorandum revokes references 1b and 1e and reinforces reference 1d. This is the third of a series of brief SSP policy updates as we continue to refine the process of developing and implementing SSPs.
- 3. <u>SSP Requirement</u>. AMSO, in reference 1c, established criteria for determining which programs must have an SSP. The AMSO position can be reviewed at the AMSO website: http://www.amso.army.mil. Any Operational Requirements Documents (ORD) submitted to TRADOC must comply with the AMSO criteria. Any program not providing an SSP in the ORD must include the rationale for this decision in Appendix H of the ORD. It is the AMSO position that current and future Army programs fall into three bins with regard to the SSP requirement:

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- a. Bin 1: The following Army programs must have SSPs.
 - (1) ACAT I and II programs.
- (2) Programs on the Office of the Secretary of Defense, Operational Test and Evaluation Directorate (DOT&E) Test and Evaluation Oversight list.
 - (3) Advanced Technology Demonstrations (ATD).
- b. Bin 2: The following Army programs do not require SSPs:
- (1) ACAT IV materiel programs. This includes small items such as holsters, kneepads, handcuffs, battlefield showers, medical vaccines, food sanitation centers, pistol mount interfaces, etc.
- (2) Non-Developmental Item (NDI) ACAT III and IV programs. This includes programs that are Commercial Off-the-Shelf (COTS) products developed by industry and do not require significant modification to meet warfighter requirements.
- c. Bin 3: All other Army programs may need SSPs subject to certain criteria discussed in paragraph 3d below. This includes:
- (1) ACAT IV training aids, devices, simulators and simulations (TADSS), modeling and simulation (M&S) and automated information systems.
- (2) ACAT III programs. This includes programs that are beyond Milestone C and purchasing products that were once Army developmental programs.
- d. The criteria for determining whether an SSP is required for a Bin 3 program are as follows:
- (1) Programs that use or plan to use M&S in support of the program must have an SSP.
- (2) Programs that have not considered the use of M&S activities will base the need for an SSP on the results of a review of the SSP Checklist in accordance with reference 1d.

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(3) Programs for which digital representations of the system are required must have an SSP.

4. SSP Overview.

- a. <u>General</u>. The SSP identifies how M&S tools support the overall development of a system. It is the key document for implementing The Army's SMART initiative. The Integrated Concept Team (ICT) that develops the ORD will develop the initial SSP--establishing the M&S foundation. At program initiation, responsibility for the SSP transitions to the Program Manager who expands and refines the SSP as the system matures.
- b. Roadmap/Foundation. The aim of the SSP is to produce a simulation roadmap that depicts "how and when" M&S tools are integrated, used, and transitioned in the course of concept exploration through system development and production. Development of the SSP must answer the following types of questions: What steps do I need to take to meet the next milestone? When do I do them? How much will they cost me? The initial SSP establishes the foundation for this roadmap as described and prioritized below.
- c. <u>Initial SSP Priorities</u>. The initial SSP addresses all areas of the format as described below in paragraph 6. It provides a level of detail appropriate for the point in the life cycle. As a minimum, the initial SSP must include the description of the system and the simulation approach/strategy and rationale. Emphasis on detail in the initial SSP is prioritized as follows: Priority 1, Description of the System (Authoritative Representation described below in paragraph 7), and Priority 2, Simulation Approach/Strategy (described below in paragraph 8).

5. SSP Review and Approval.

a. The initial SSP is developed with the ORD and will accompany the ORD during staffing and approval.

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- b. The Deputy Chief of Staff for Simulations and Analysis (DCSSA) will separately staff the SSP with the "M&S community."
- c. The DCSSA will provide HQ TRADOC coordination of the initial SSP prior to forwarding the ORD package for approval.
- d. The initial SSP will be approved with the approval of the ORD.
- 6. <u>SSP Format</u>. The current SSP format is available at the TRADOC DCSSA website. General categories of information required in the SSP include the following:
 - a. General.
 - b. Executive Summary.
 - c. System Description.
 - d. Program Acquisition Strategy.
 - e. Simulation Approach/Strategy and Rationale.
- 7. System Description (Authoritative Description) in the SSP. The first priority in developing a SSP is to describe the system requirements/capabilities adequately. This is referred to as the "Authoritative Representation."
- a. <u>Purpose</u>. The purpose of the Authoritative Representation is twofold:
- (1) To organize information about the system in a standard way that supports export into M&S of all domains.
- (2) To establish, from conception, a permanent data repository (one source) for the system that is maintained and further developed throughout the system's life cycle.
- b. <u>Structure</u>. The general structure of the Authoritative Representation includes the three categories of data listed below. This data is derived from the ORD, most notably from

paragraphs 1, 4, 5, and 7. A more detailed template of Authoritative Representation data fields will be posted on the DCSSA website.

- (1) Performance (reliability, survivability, speed, lethality, and size).
- (2) Behavior (individual and organizational tactics, techniques, and procedures).
- (3) Environment (scenario, terrain, force structure, and weather).
- c. <u>Growth</u>. As the system itself matures, the data describing the system matures and grows. The Authoritative Representation becomes progressively more detailed and more accurate, also. (<u>Note: As changes to the ORD occur, coordination with and approval of the combat developer is required.)</u>
- d. <u>Maintenance and Ownership</u>. The initial Authoritative Representation is established by the ICT. Upon program initiation, ownership and maintenance of the Authoritative Representation are transferred to the Program Manager.
- e. $\underline{\text{Access}}$. The Authoritative Representation will be accessible to Army M&S developers and users.
- f. Review. The Authoritative Representation is reviewed as part of the ORD review process.
- 8. <u>Simulation Approach/Strategy and Rationale</u>. The second priority in developing an initial SSP is to develop the Simulation Approach/Strategy. For the initial SSP, the task is to map M&S applications to program needs. This is done through the two steps described below:
- a. <u>Step One-Issue Identification</u>. Identify the issues, questions, decisions, and information that could be supported by the use of M&S. This step leverages ICT knowledge of the required system by capturing all key issues in a format that supports subsequent mapping to M&S.

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- b. Step Two-M&S Mapping. Harness the expertise of the ICT to identify candidate M&S and correlate ("map") them with the issues, questions, etc. identified in Step One. This "mapping" is captured through a table or spreadsheet that portrays these issues by program phase, and designates M&S that will be used to address each one. Keep in mind that this is the initial attempt to map M&S applications to program needs, so many of the M&S cells might be empty; however, it provides a foundation for the Program Manager to further develop the M&S roadmap.
- 9. <u>SSP Websites</u>. Additional information about the SSP is available at the following websites:
- a. TP 71-9 is on the DCSDEV website: $\frac{\text{http://www.tradoc.}}{\text{army.mil/dcscd.}}$
- b. Current information related to SSP development, process/procedures and reviews is available on the TRADOC DCSSA website: http://www.tradoc.army.mil/dcssa/SSP.htm.
- c. SSP Format: http://www.tradoc.army.mil/dcssa
 /Briefings/SSP%20checklist.ppt.
- d. Planning guidelines for SMART contain additional information and can be found on the AMSO website: http://www.amso.army.mil/main.htm.
- 10. POC is Mr. Scott Callender, (757) 788-2823, Callendersd@monroe.army.mil. DCSSA POC for SSP assistance is Ms. Angela Winter, (757) 788-5832, Angela.Winter@monroe.army.mil.

/signed/

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